

APPENDIX 8.1A

# Figures

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**Figure 8.1-1**  
**January Predominant Mean Circulation of the Surface Winds**

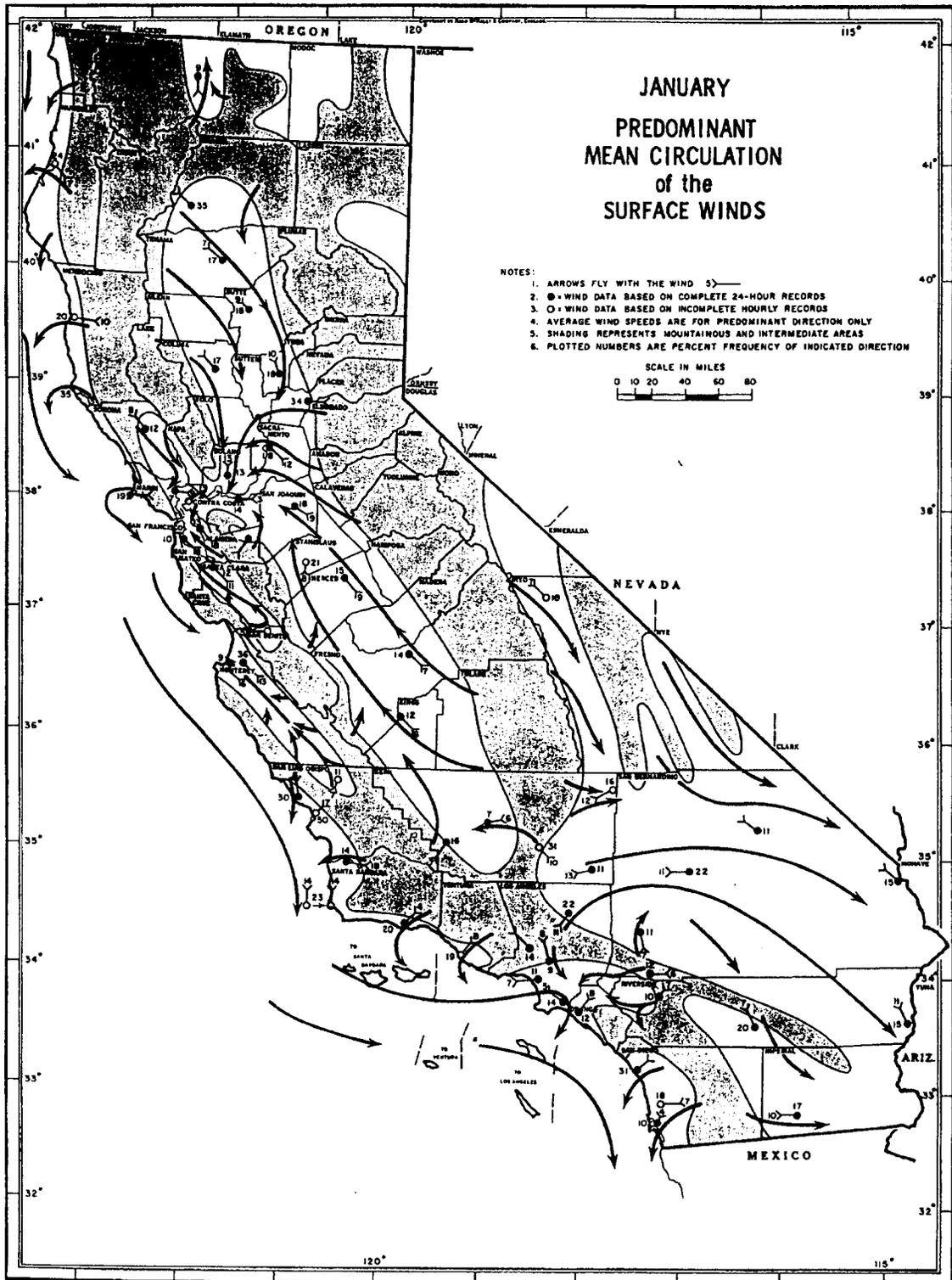


Figure 8.1-2  
 April Predominant Mean Circulation of the Surface Winds

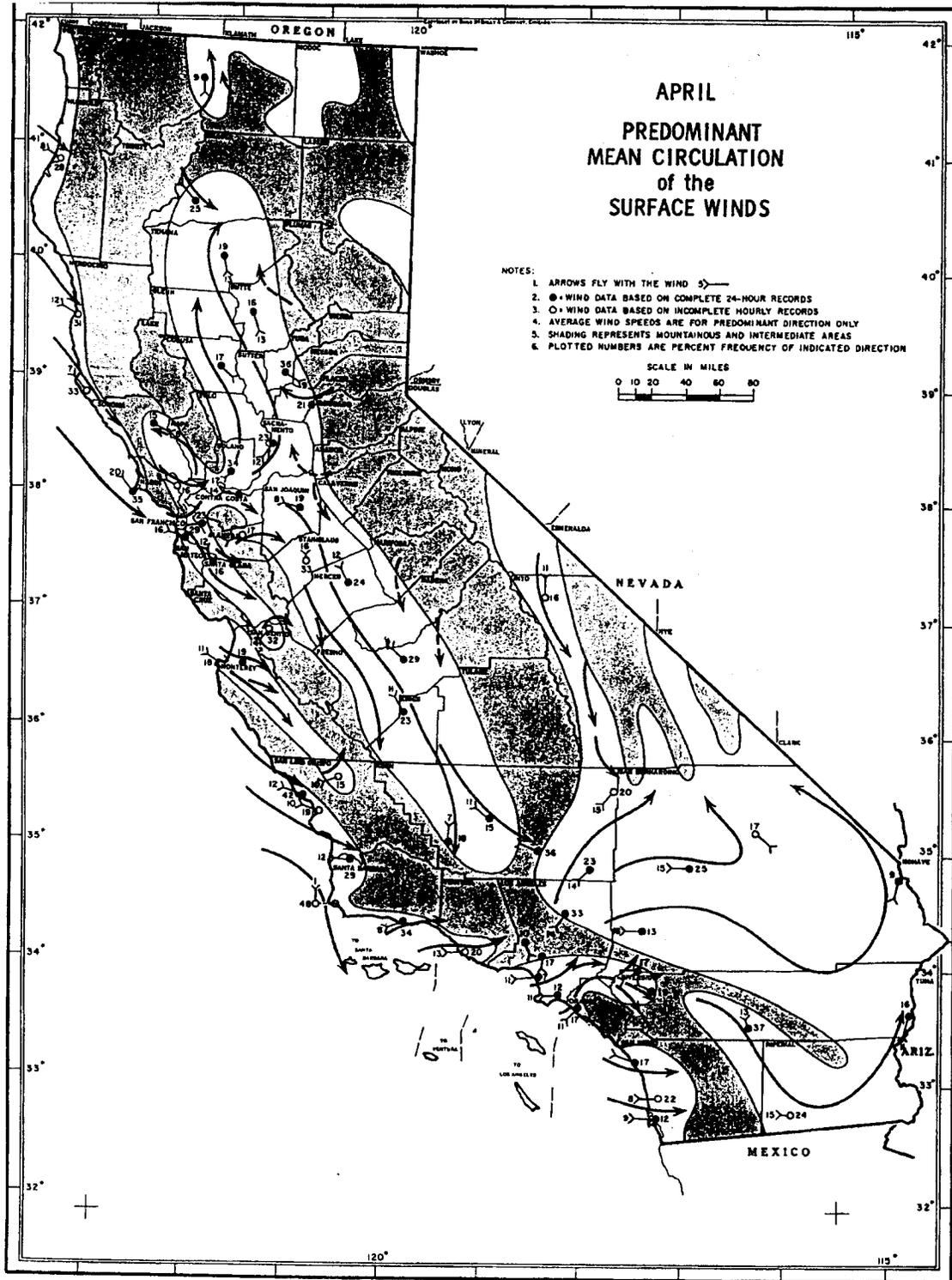
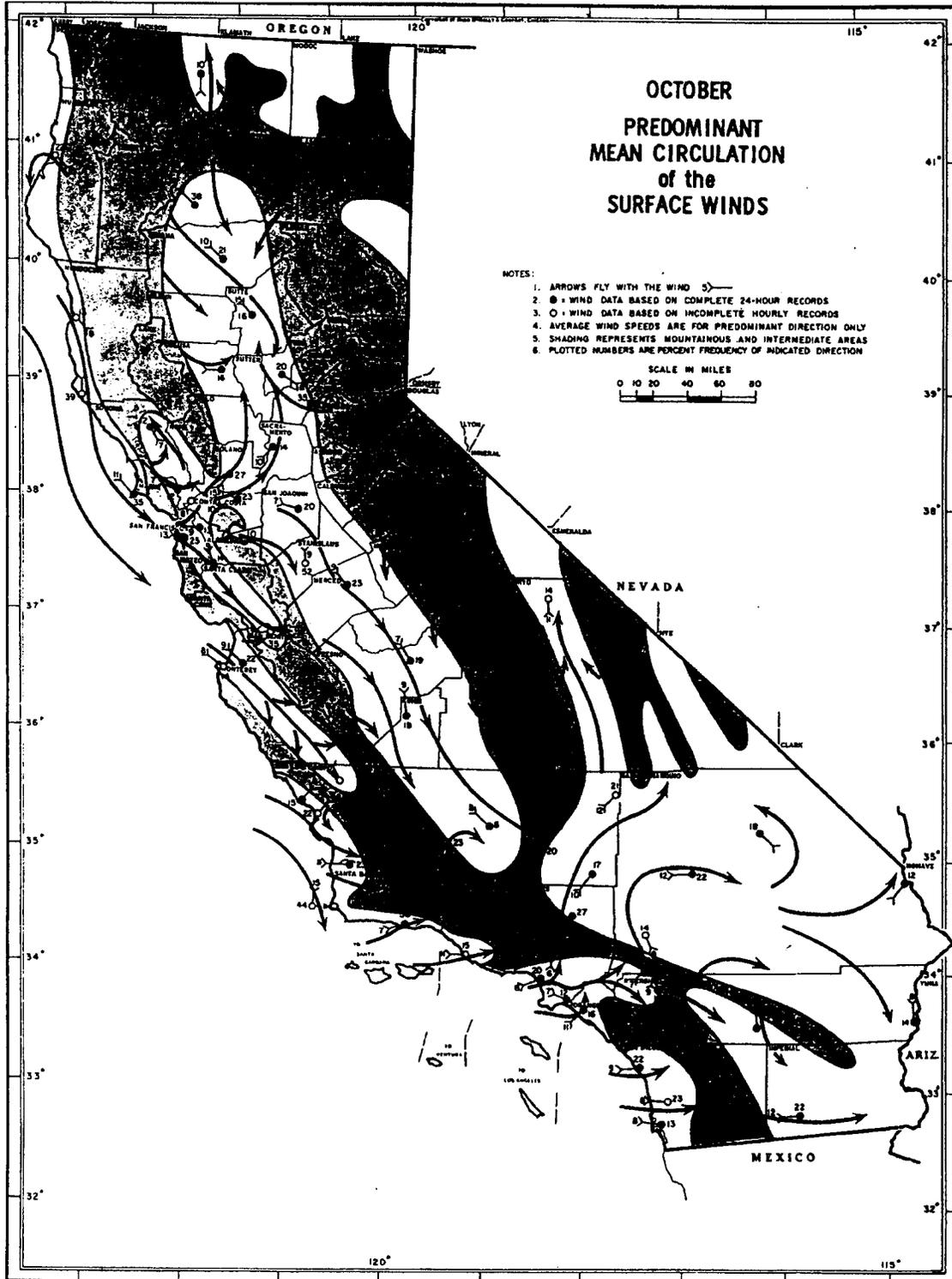
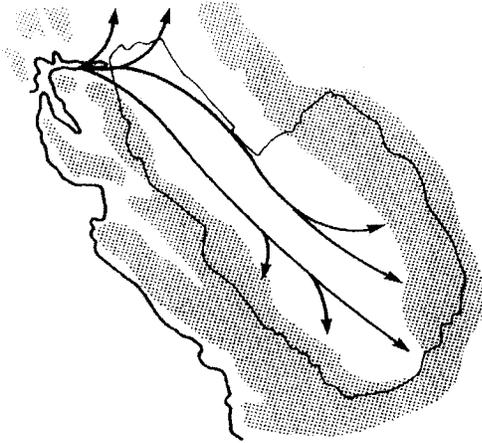




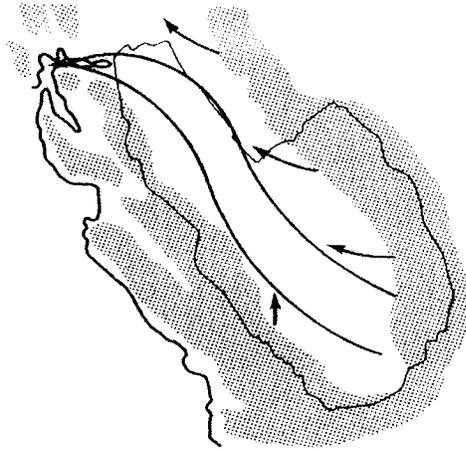
Figure 8.1-4  
 October Predominant Mean Circulation of the Surface Winds



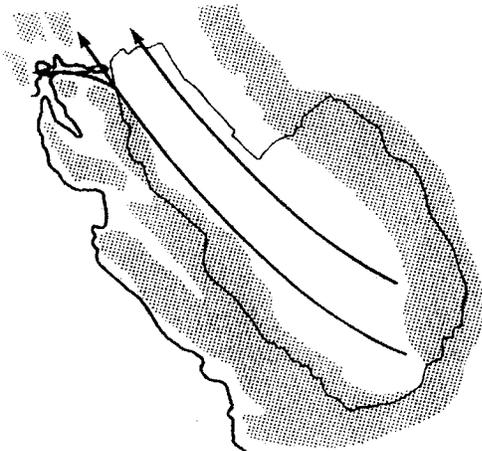
**Figure 8.1-5**  
**San Joaquin Valley Air Flow Pattern Types**



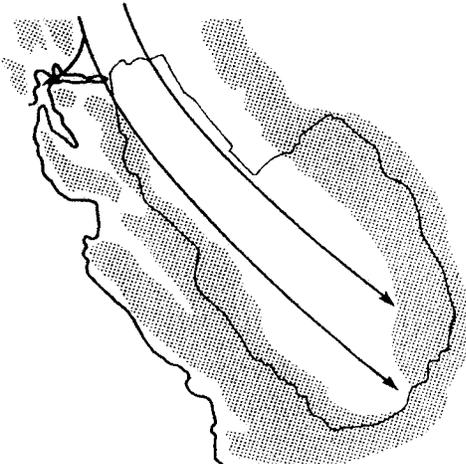
I Airflow



II Downvalley / Drainage



III Southerly



IV Northerly (No Marine Air)

Figure 8.1-6

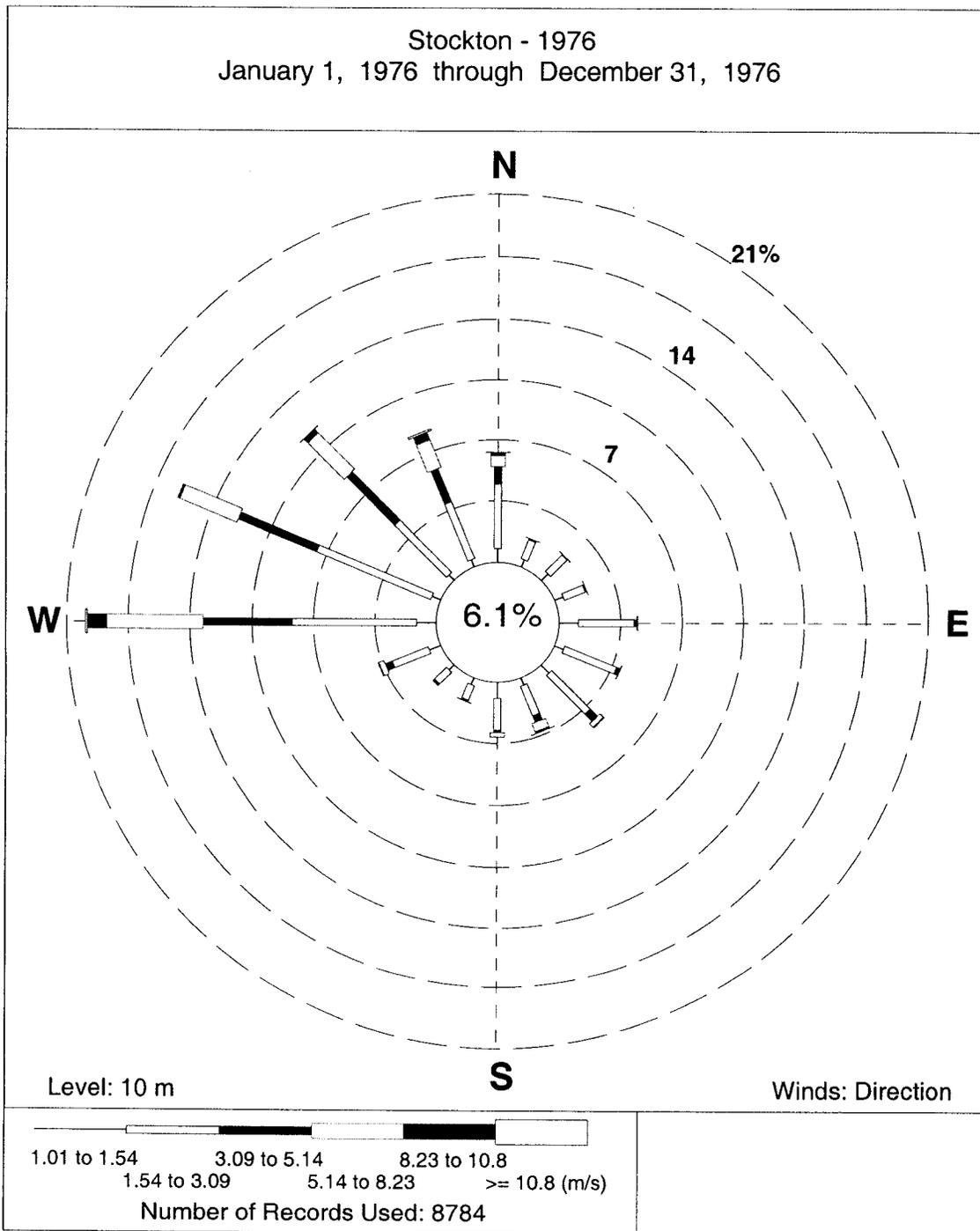


Figure 8.1-6a

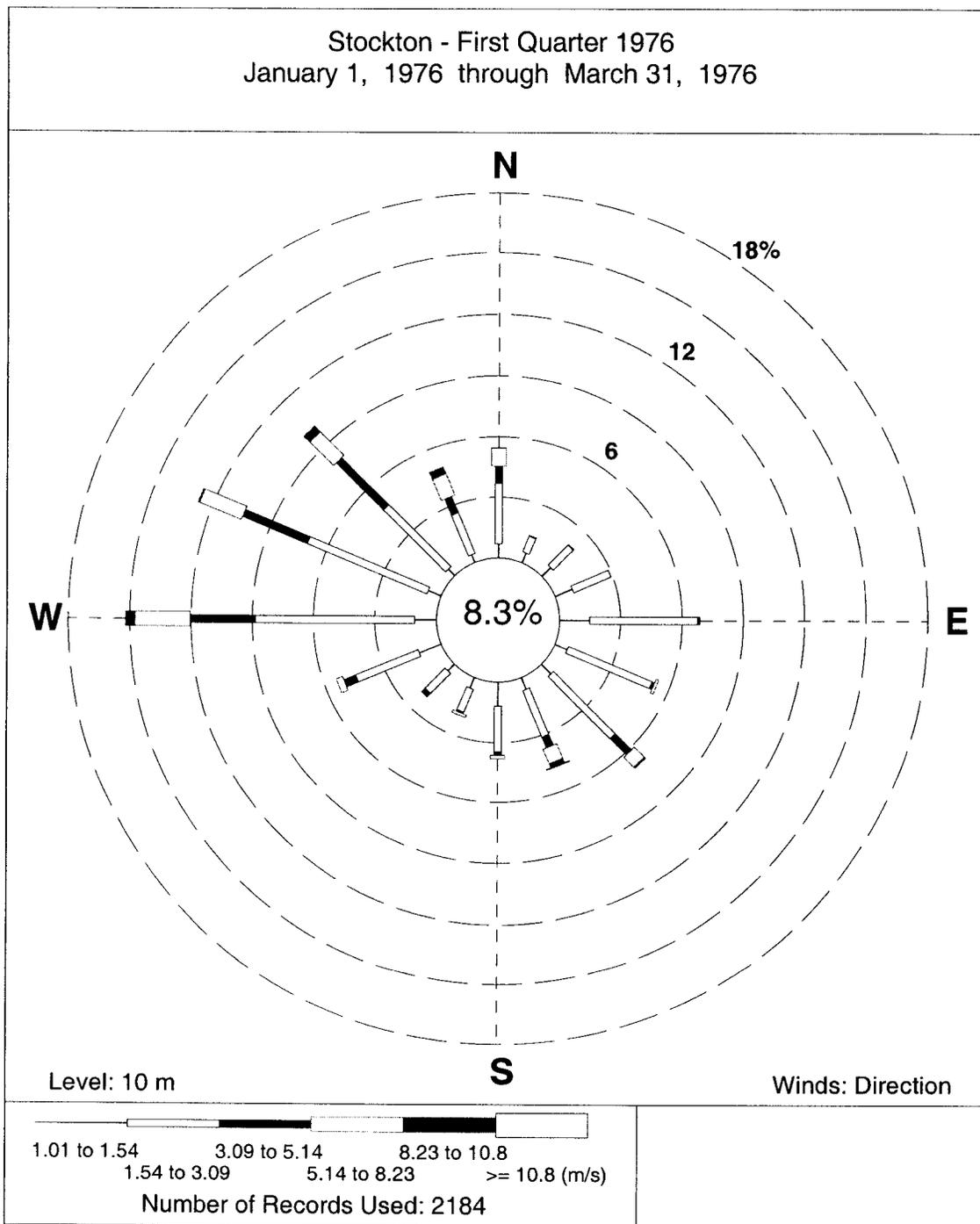


Figure 8.1-6b

Stockton - Second Quarter 1976  
April 1, 1976 through June 30, 1976

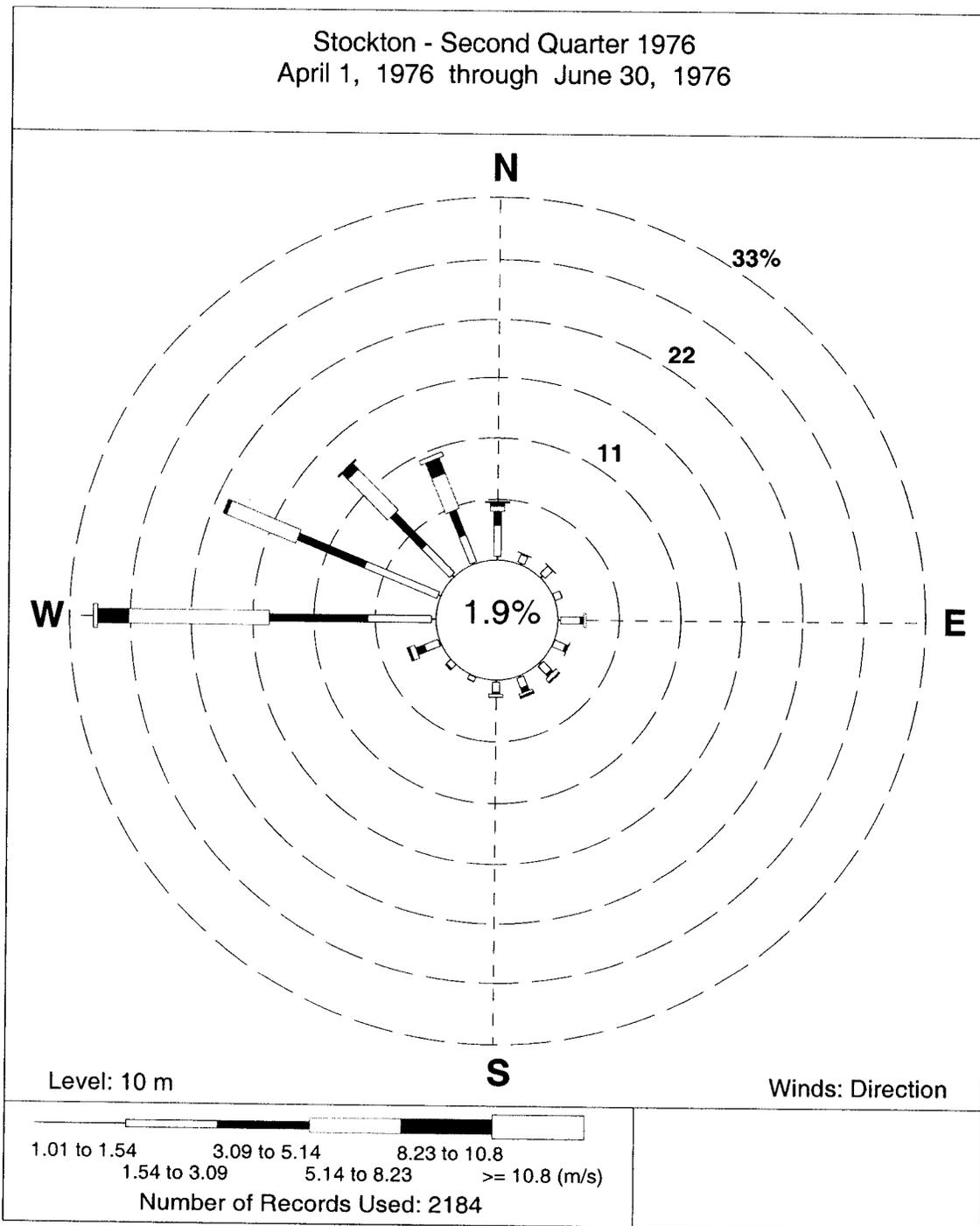


Figure 8.1-6c

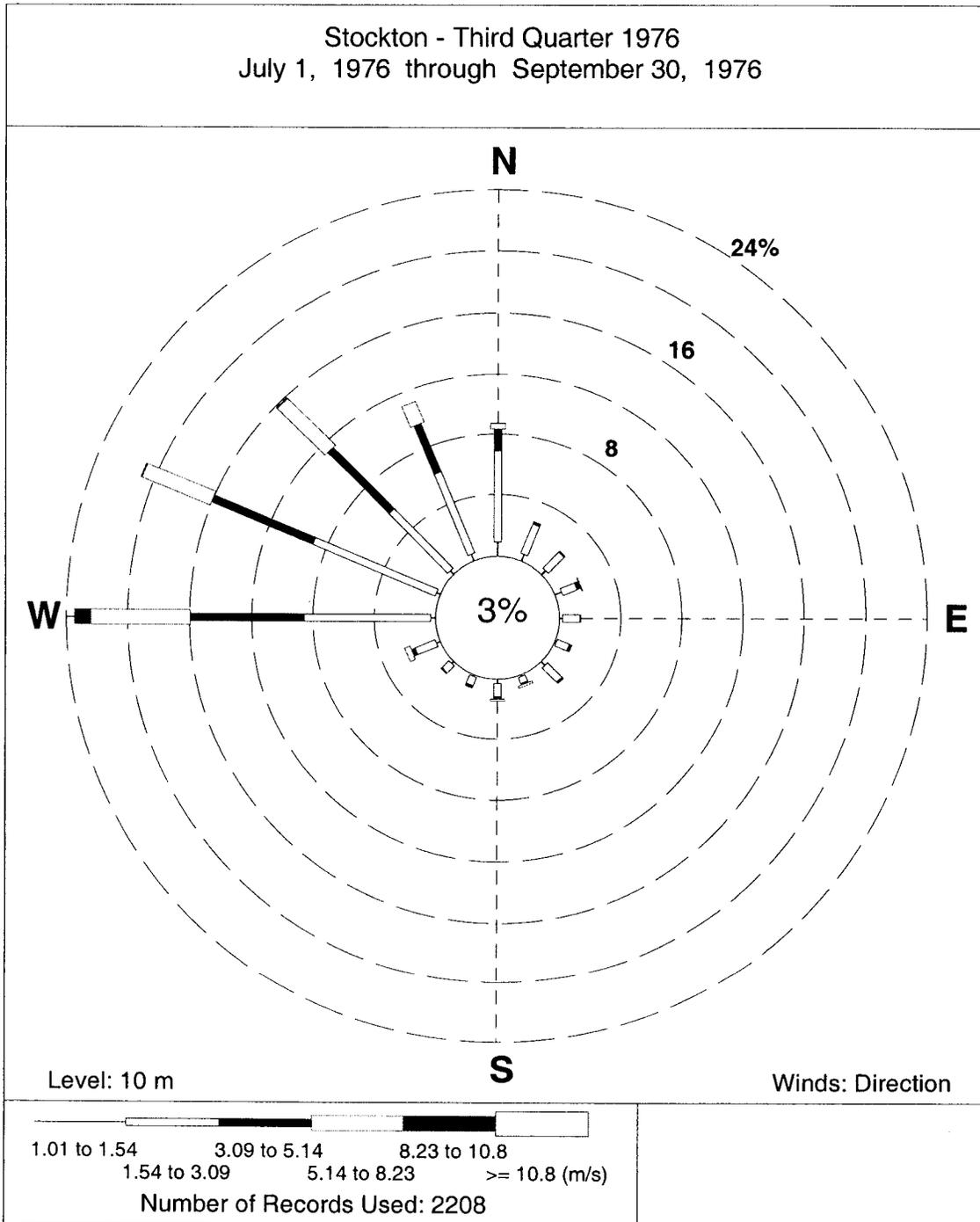


Figure 8.1-6d

Stockton - Fourth Quarter 1976  
October 1, 1976 through December 31, 1976

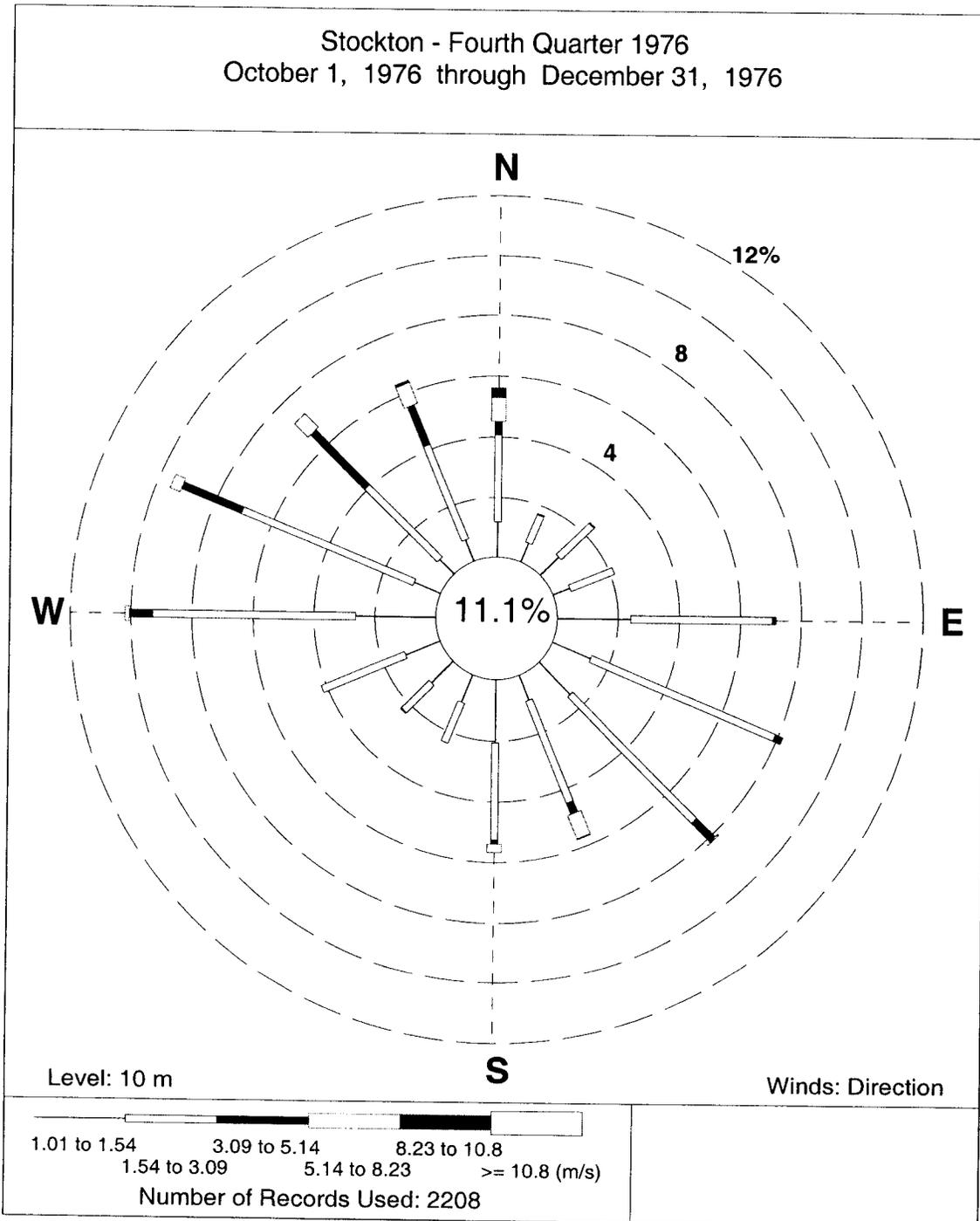
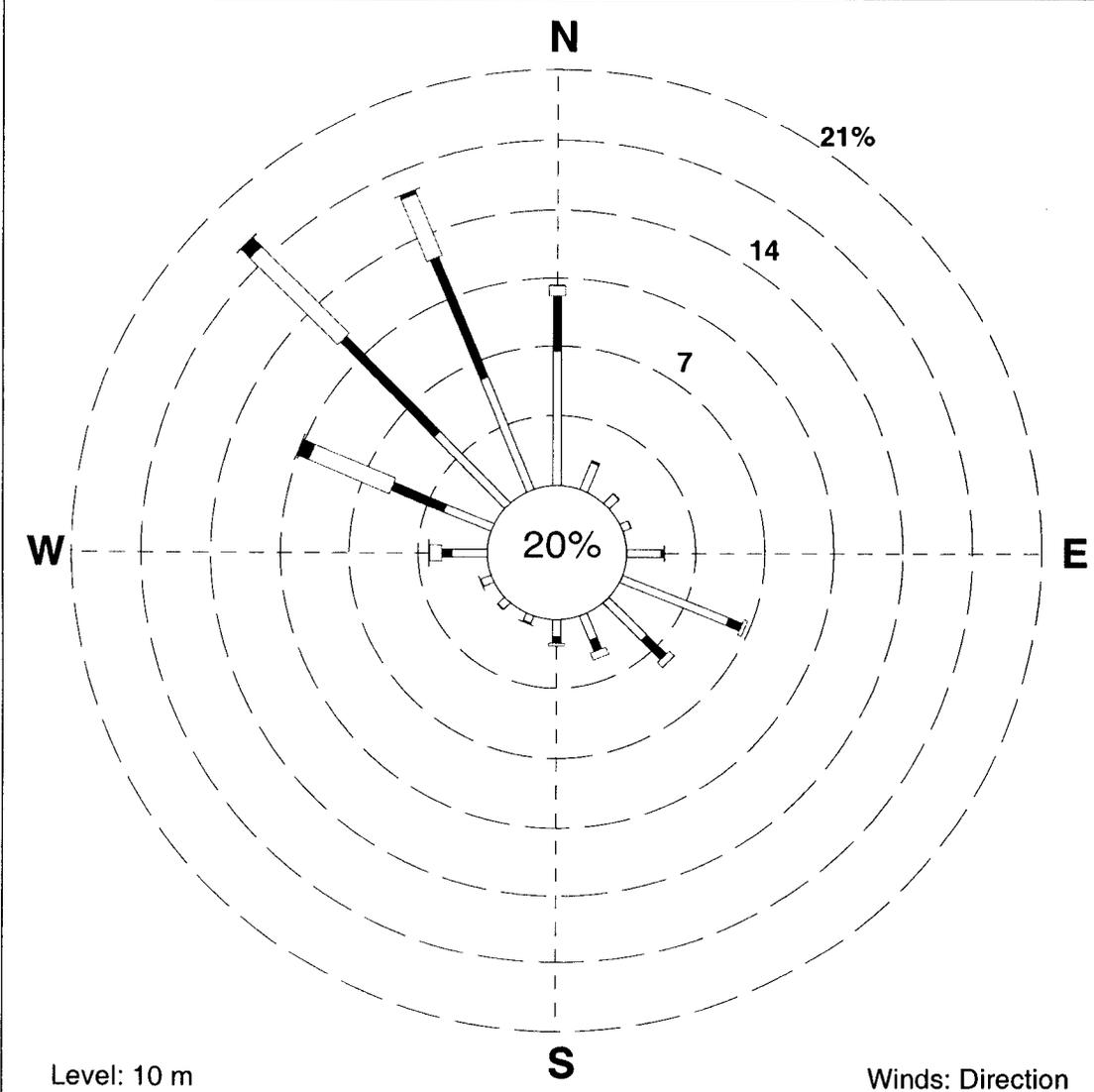


Figure 8.1-7

Modesto Airport - 1999  
January 1, 1999 through December 31, 1999



1.01 to 1.54	3.09 to 5.14	8.23 to 10.8
1.54 to 3.09	5.14 to 8.23	>= 10.8 (m/s)

Number of Records Used: 8760



**Figure 8.1-7b**

Modesto Airport - Second Quarter 1999  
 April 1, 1999 through June 30, 1999

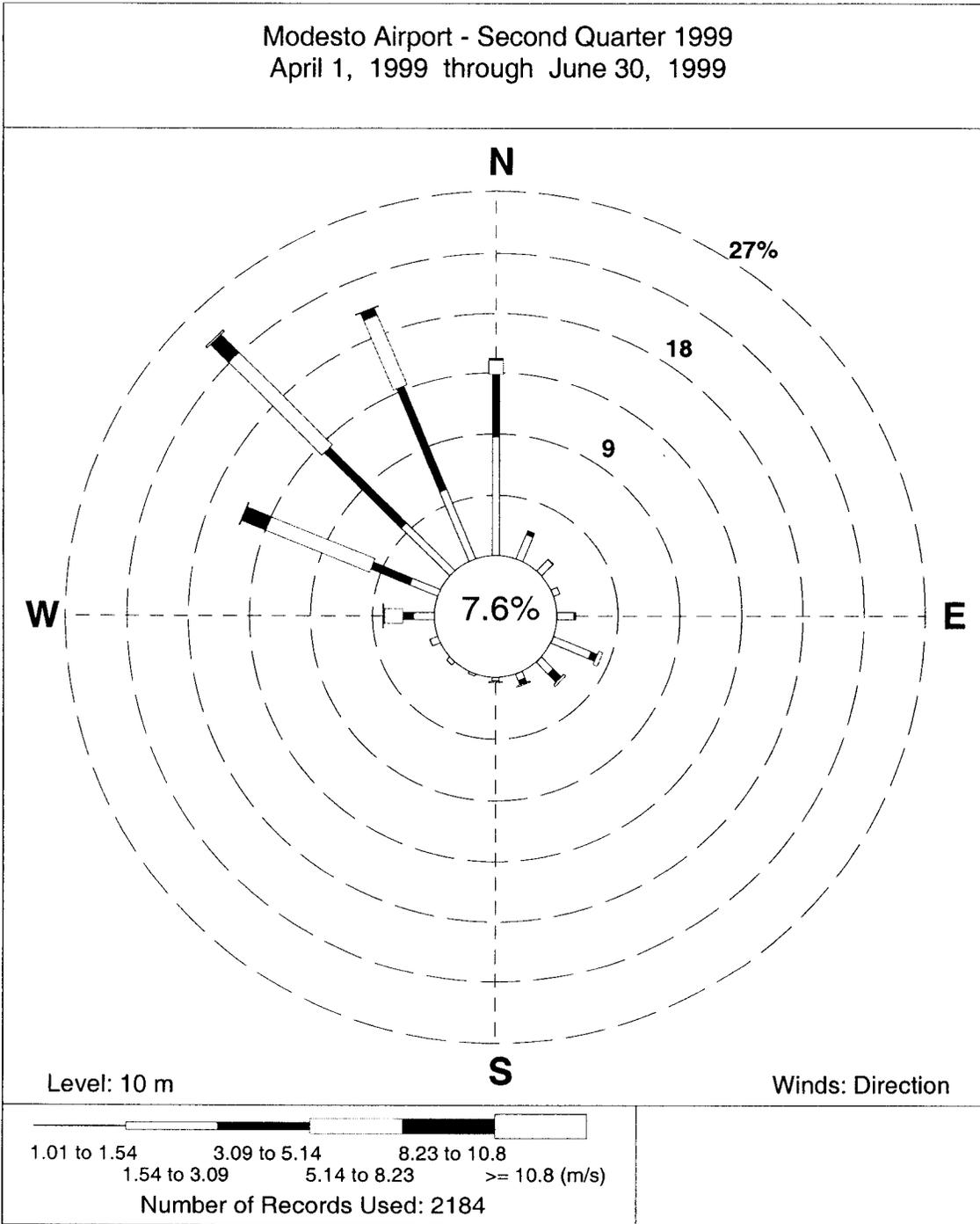


Figure 8.1-7c

Modesto Airport - Third Quarter 1999  
July 1, 1999 through September 30, 1999

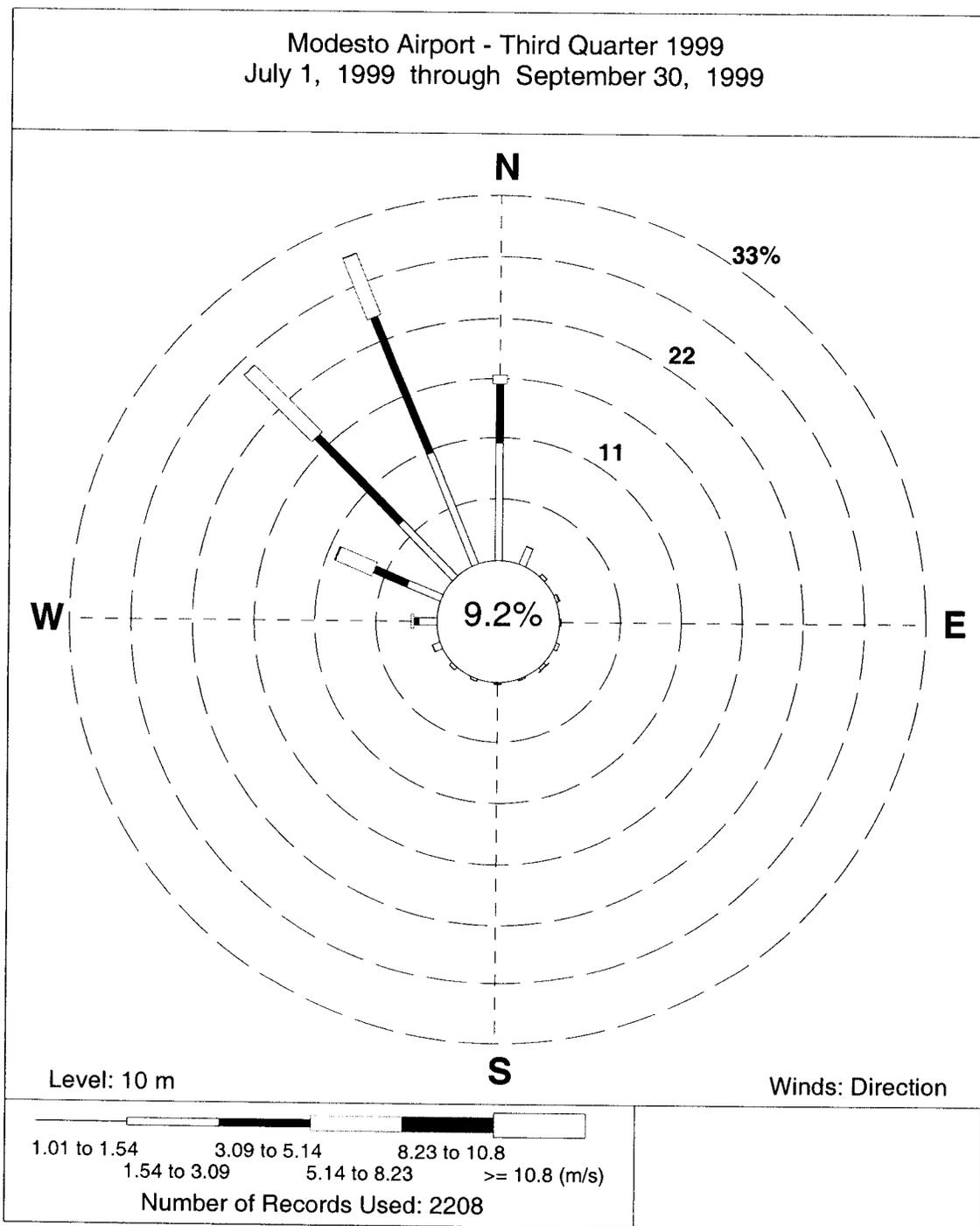
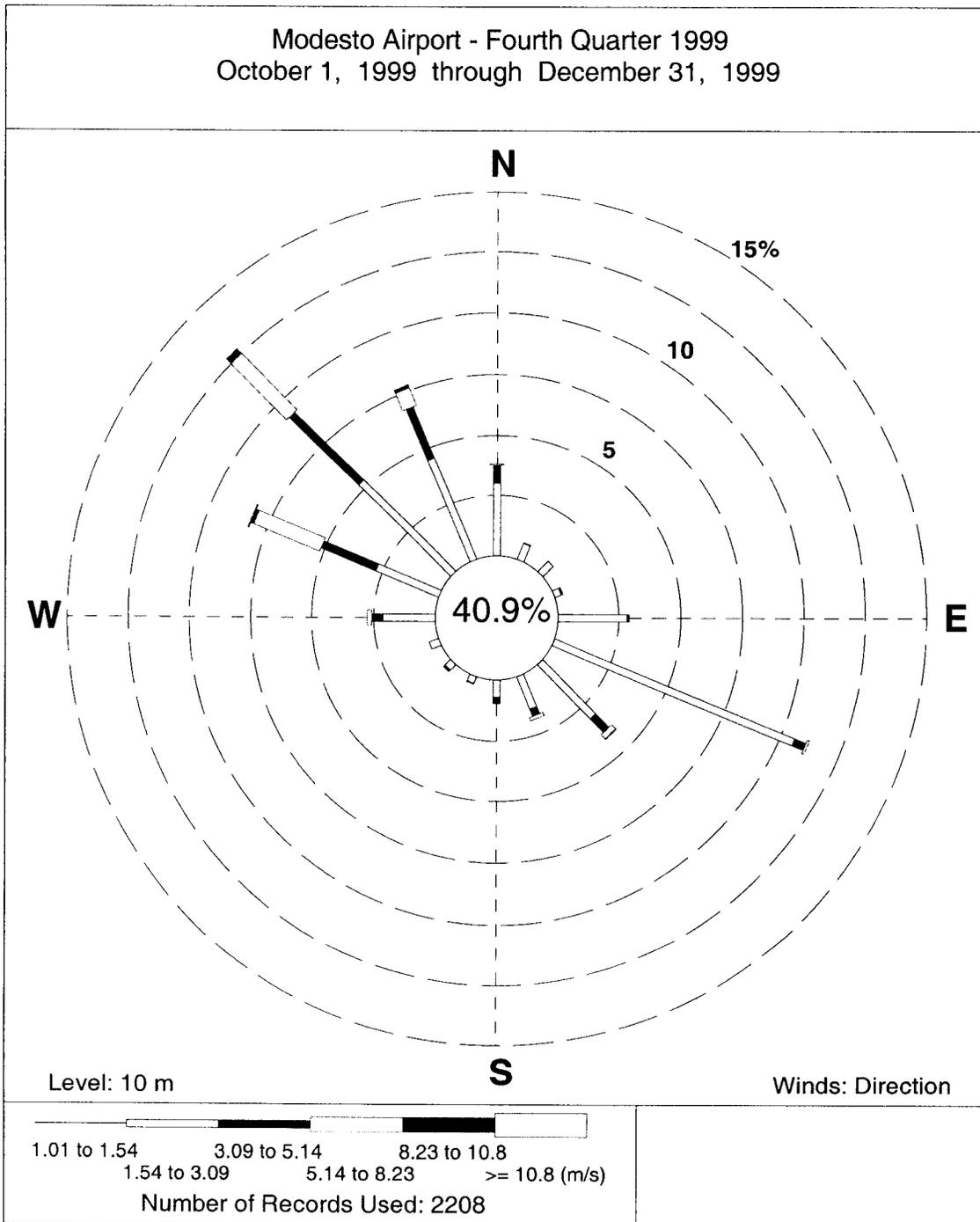
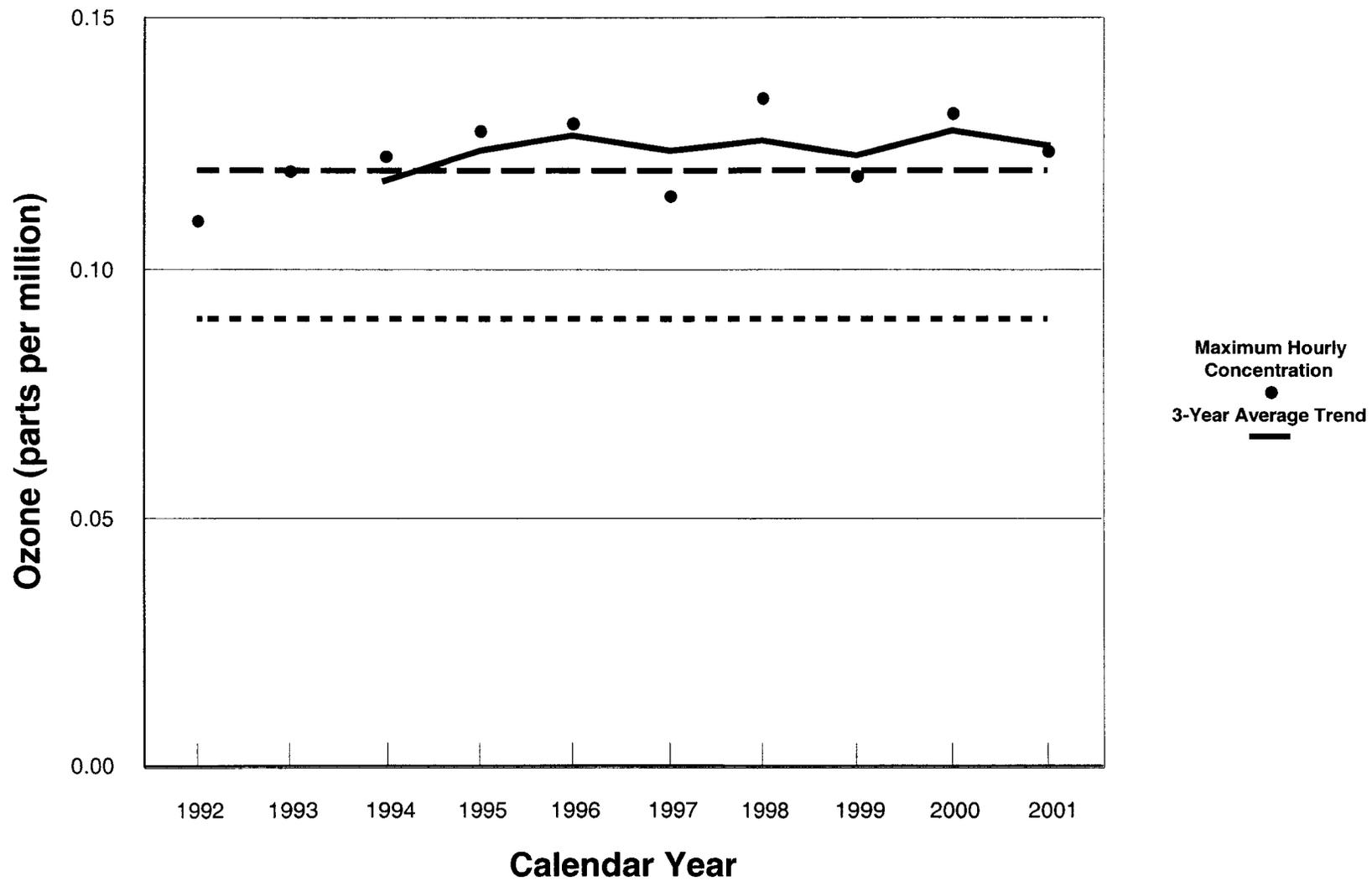


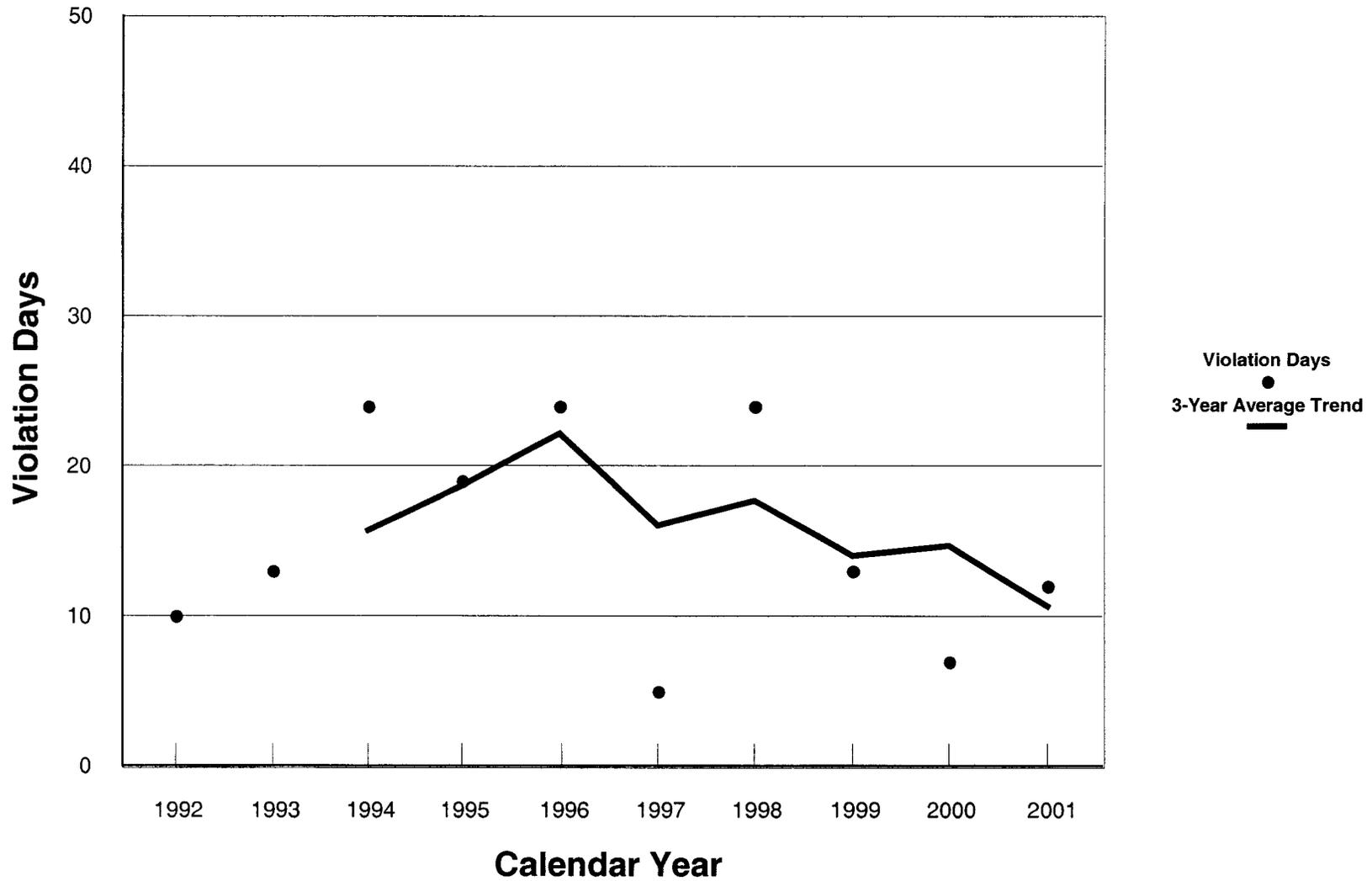
Figure 8.1-7d



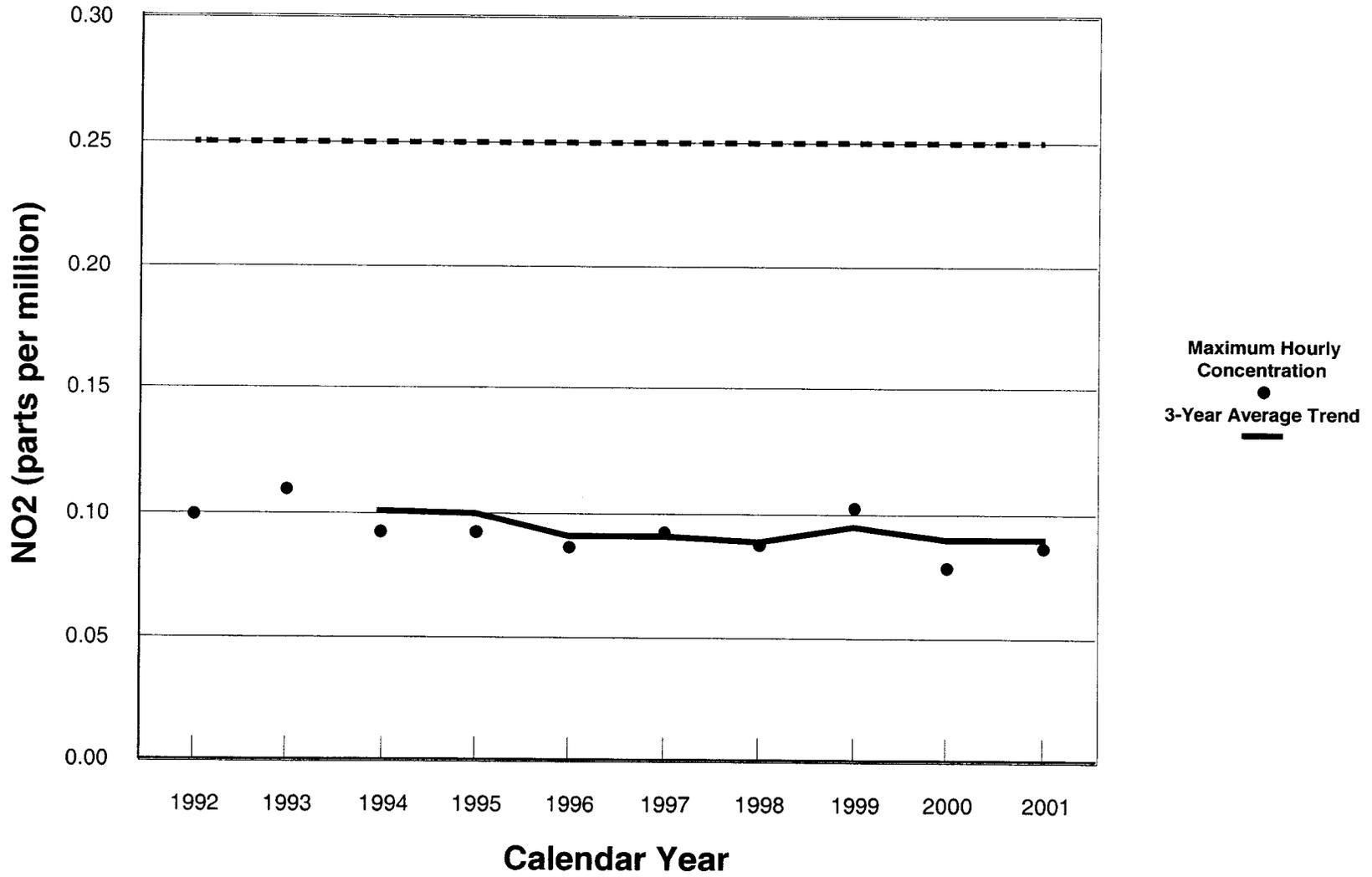
**Figure 8.1-8a**  
**Maximum Hourly Ozone Levels**  
**Modesto, 1992-2001**



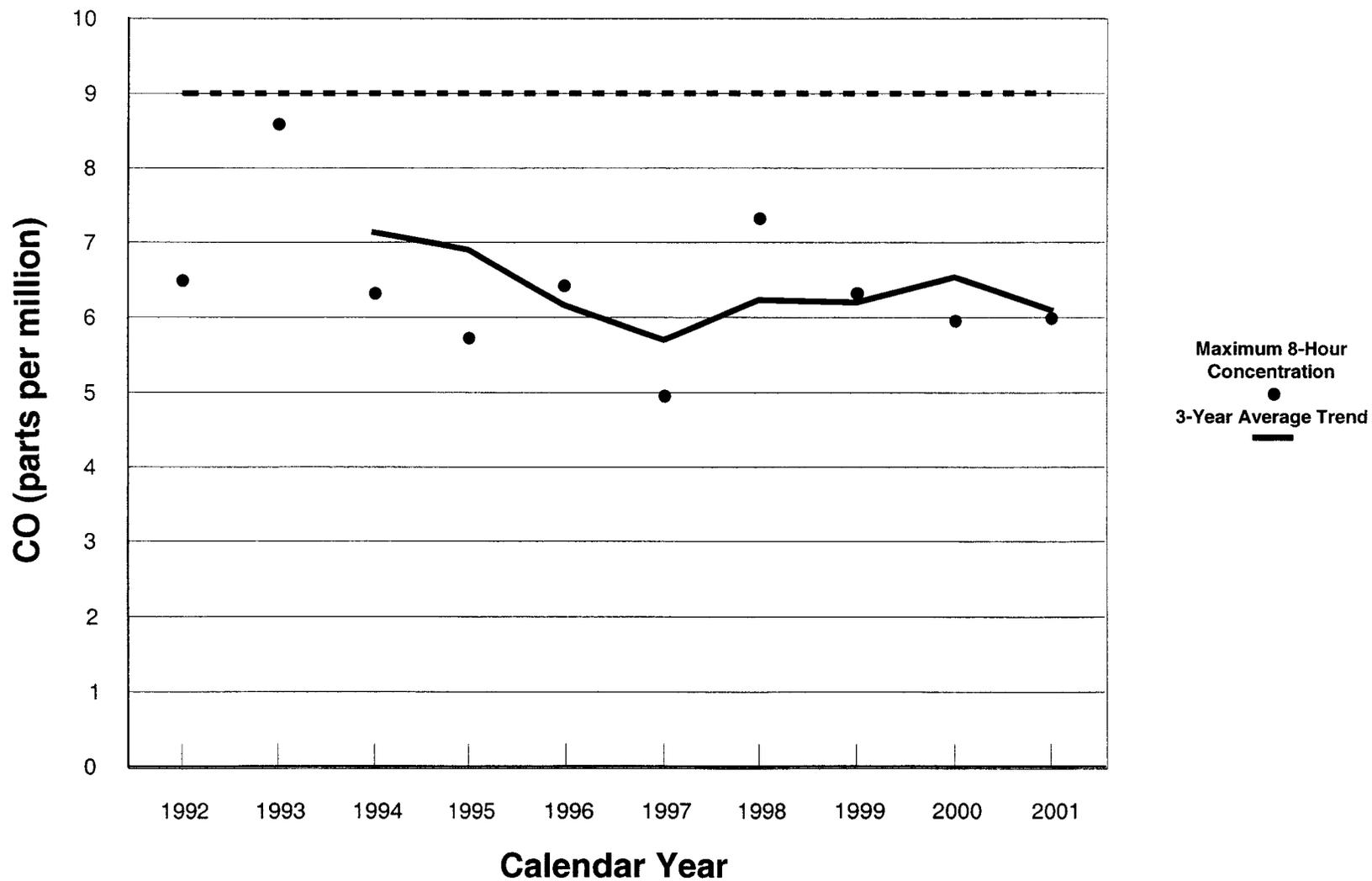
**Figure 8.1-8b**  
**Violations of the California 1-Hour Ozone Standard (0.09 ppm)**  
**Modesto, 1992-2001**



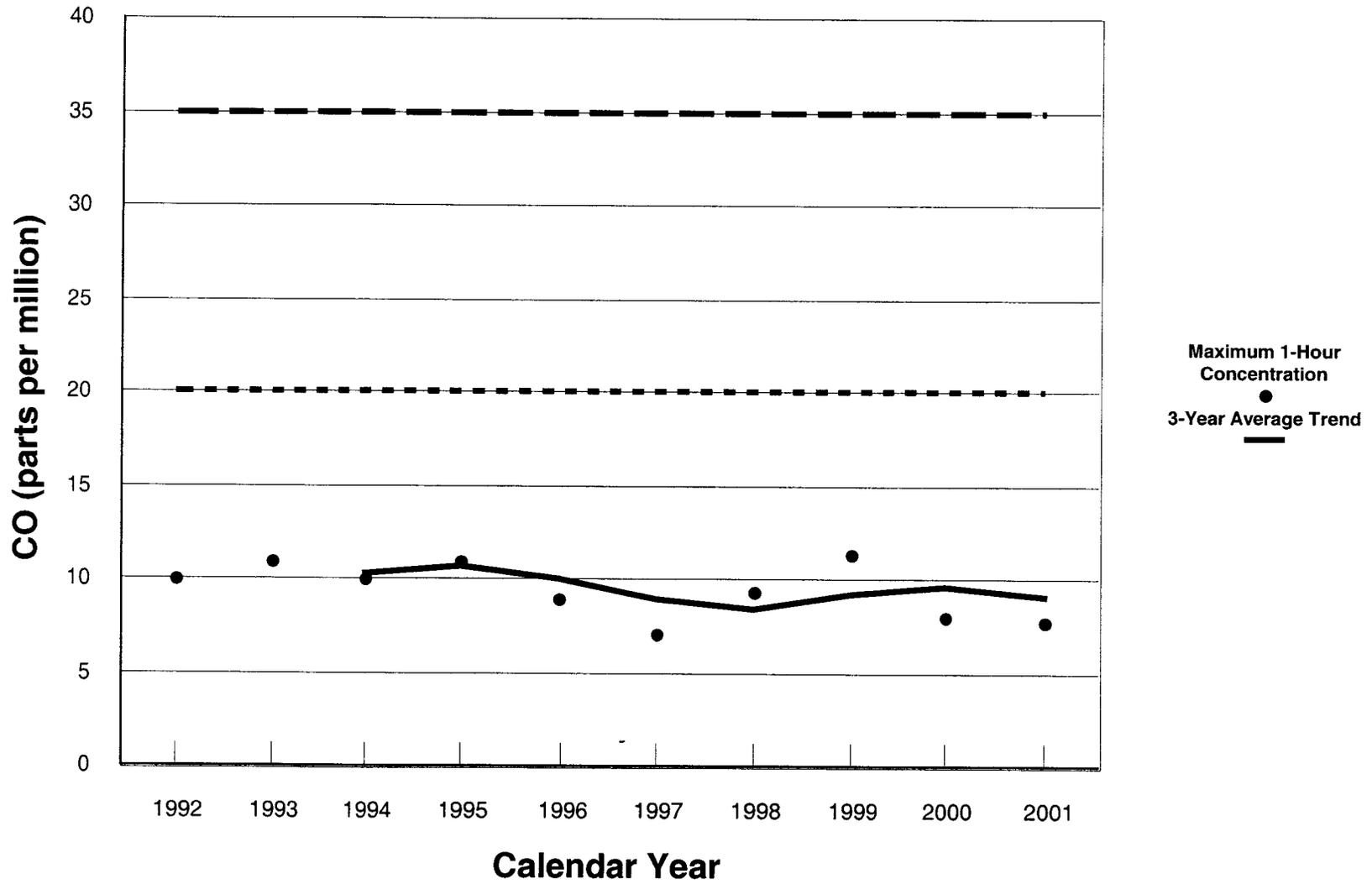
**Figure 8.1-9**  
**Maximum Hourly NO<sub>2</sub> Levels**  
**Modesto, 1992-2001**



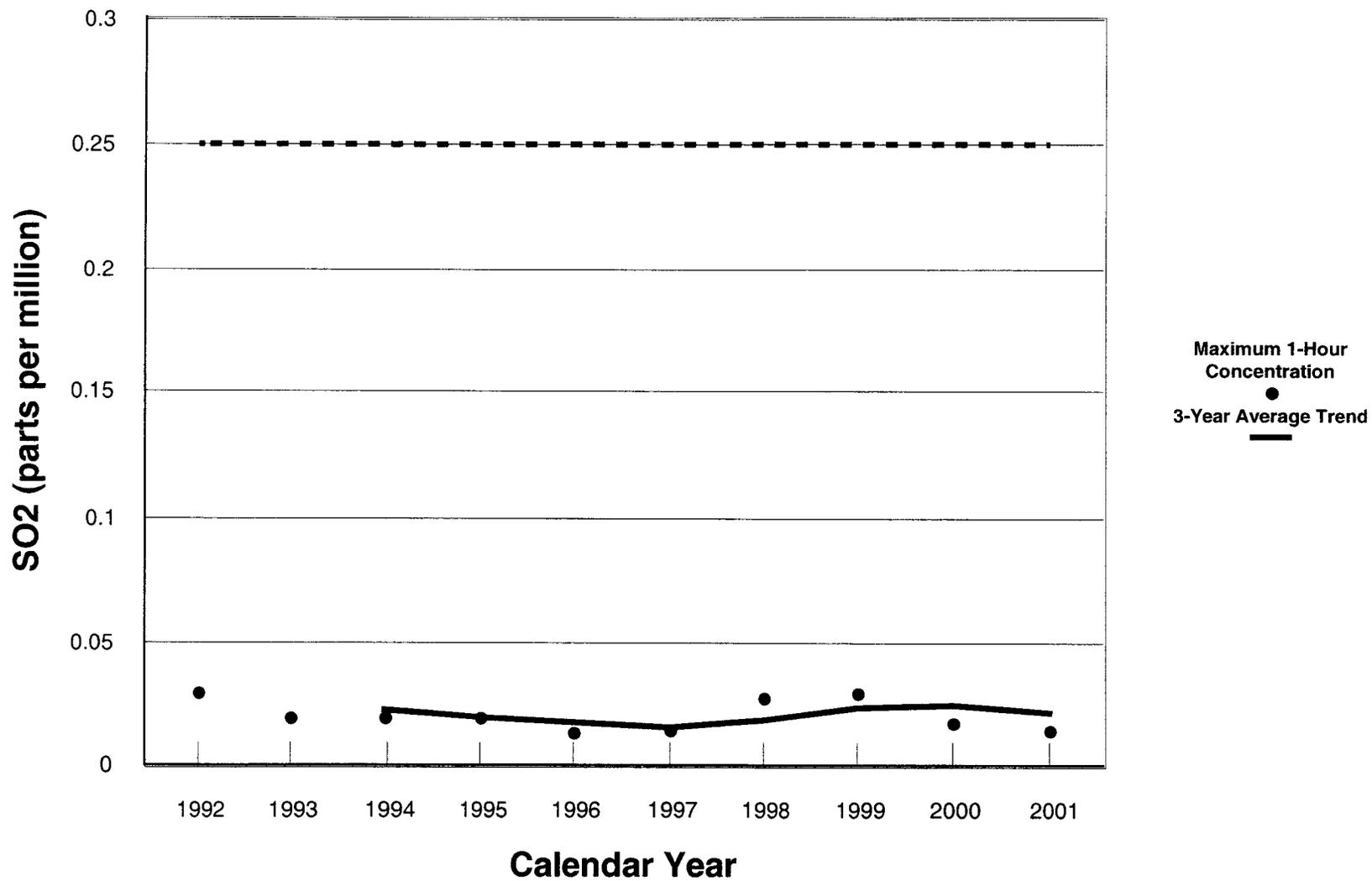
**Figure 8.1-10**  
**Maximum 8-Hour Average CO Levels**  
**Modesto, 1992-2001**



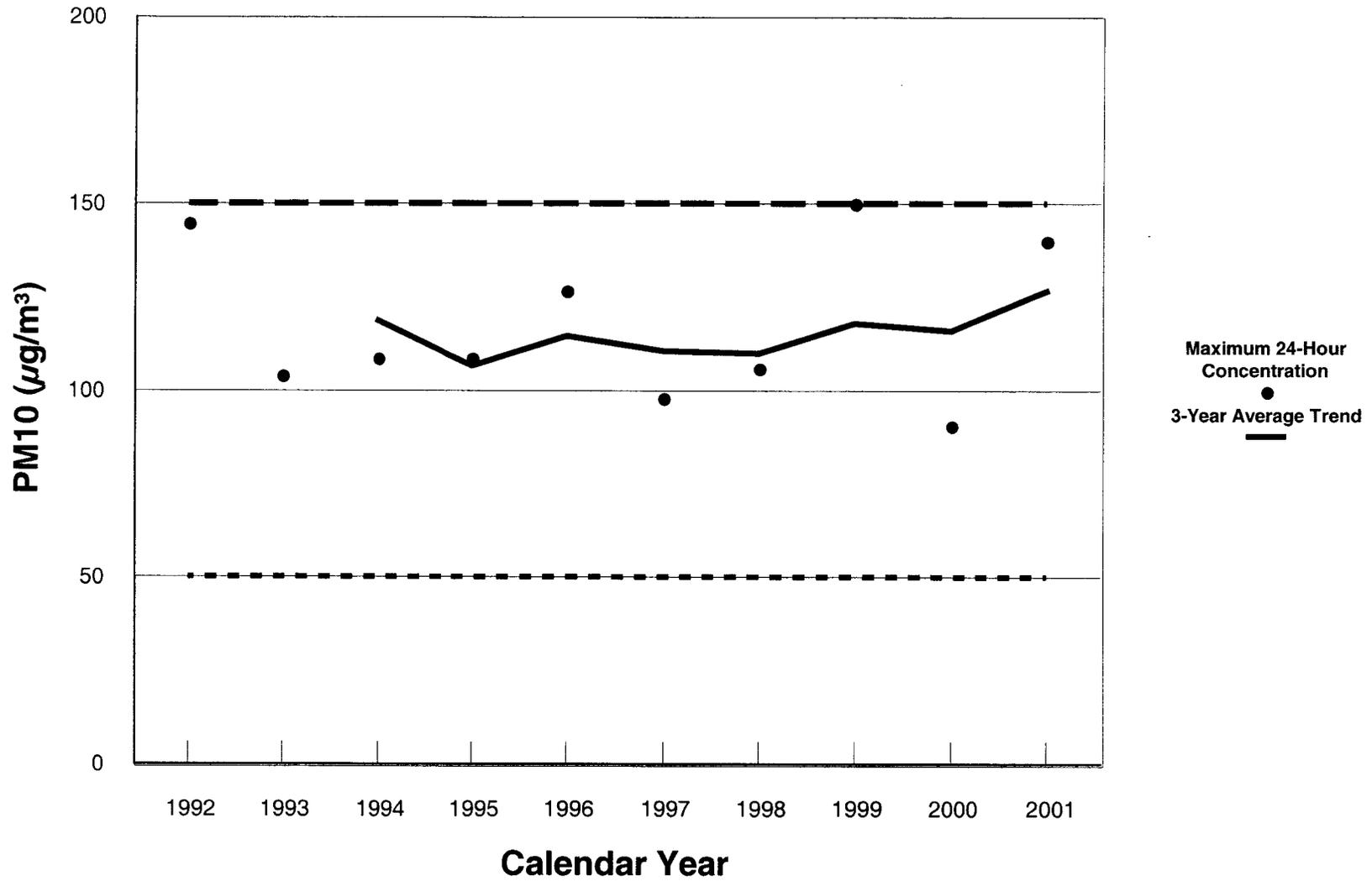
**Figure 8.1-11**  
**Maximum 1-Hour Average CO Levels**  
**Modesto, 1992-2001**



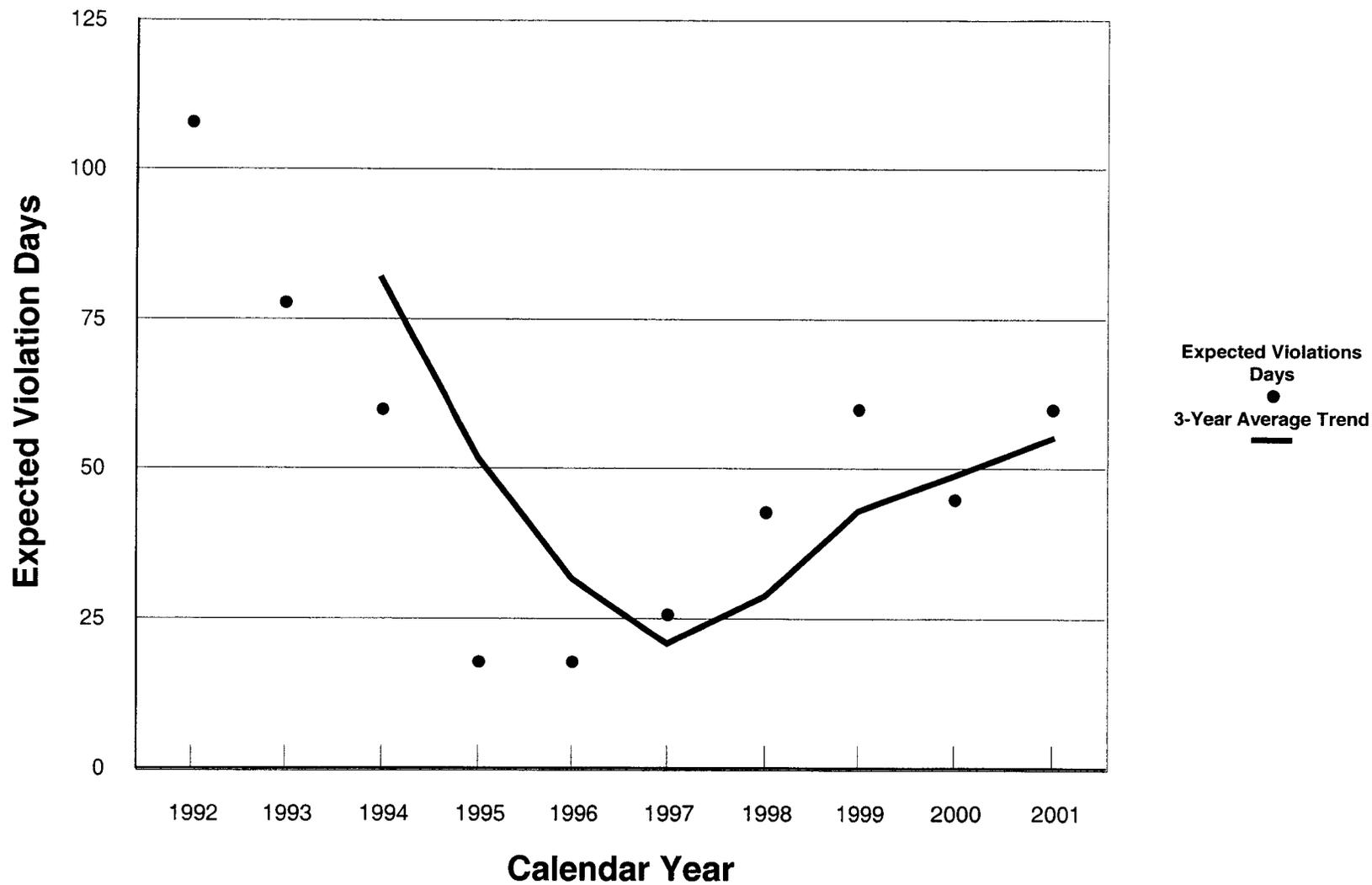
**Figure 8.1-12**  
**Maximum 1-Hour SO<sub>2</sub> Levels**  
**Bethel Island, 1992-2001**



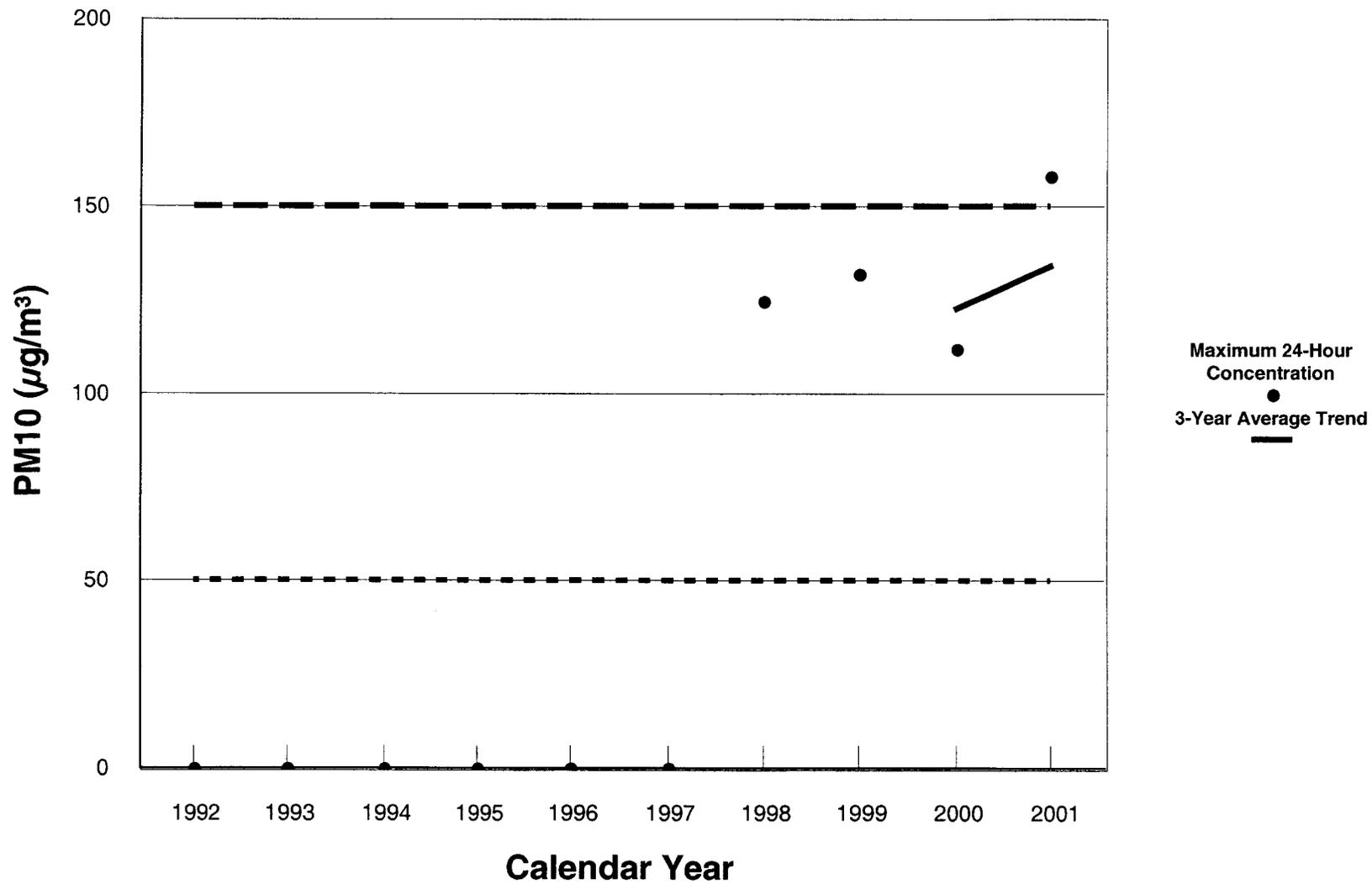
**Figure 8.1-13**  
**Maximum 24-Hour PM10 Levels**  
**Hazelton Street - Stockton, 1992-2001**



**Figure 8.1-14**  
**Expected Violations of the California 24-Hour PM10 Standard ( $50 \mu\text{g}/\text{m}^3$ )**  
**Hazelton Street - Stockton, 1992-2001**



**Figure 8.1-15**  
**Maximum 24-Hour PM10 Levels**  
**14th Street - Modesto, 1992-2001**



**Figure 8.1-16**  
**Expected Violations of the California 24-Hour PM10 Standard ( $50 \mu\text{g}/\text{m}^3$ )**  
**14th Street - Modesto, 1992-2001**

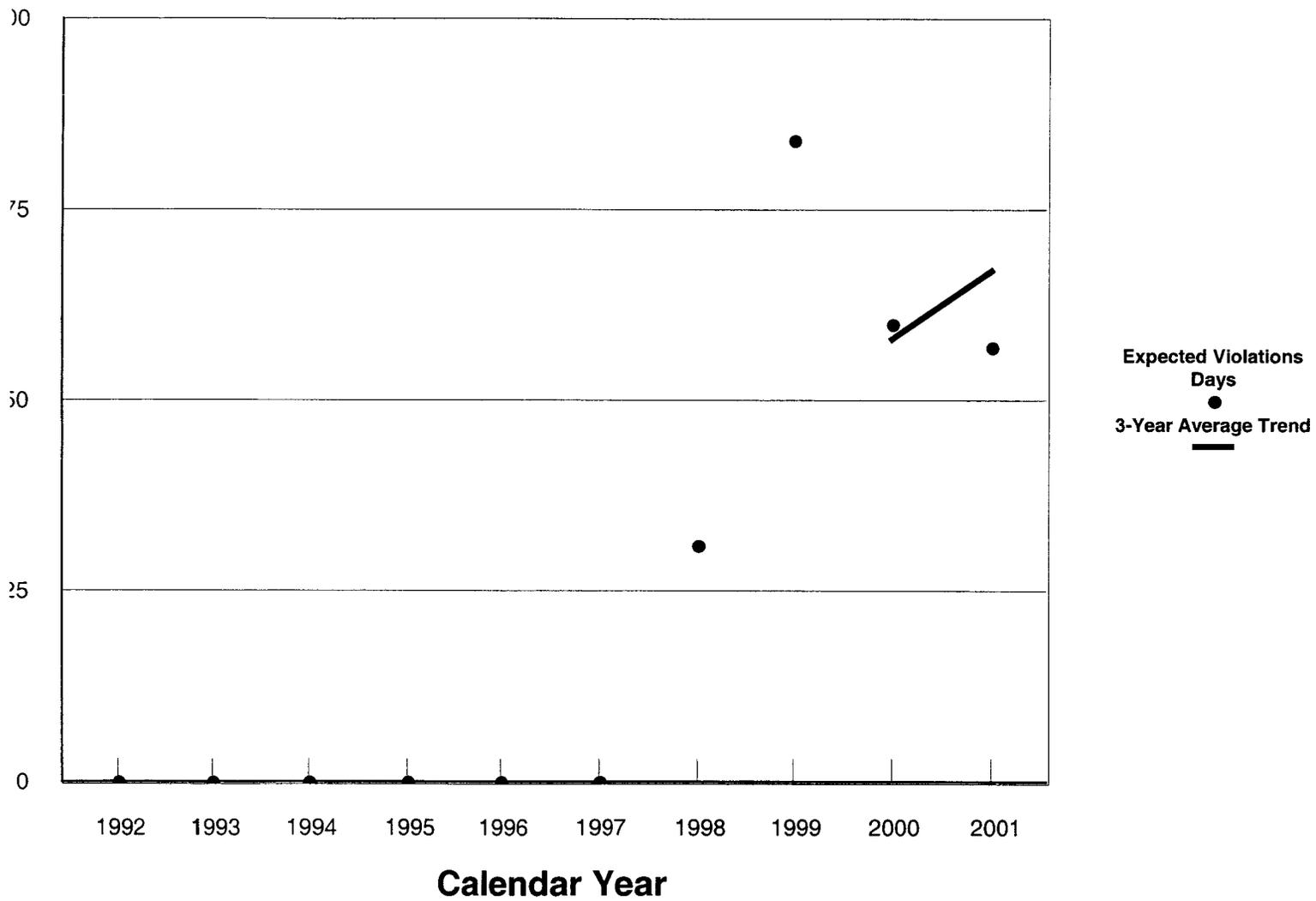
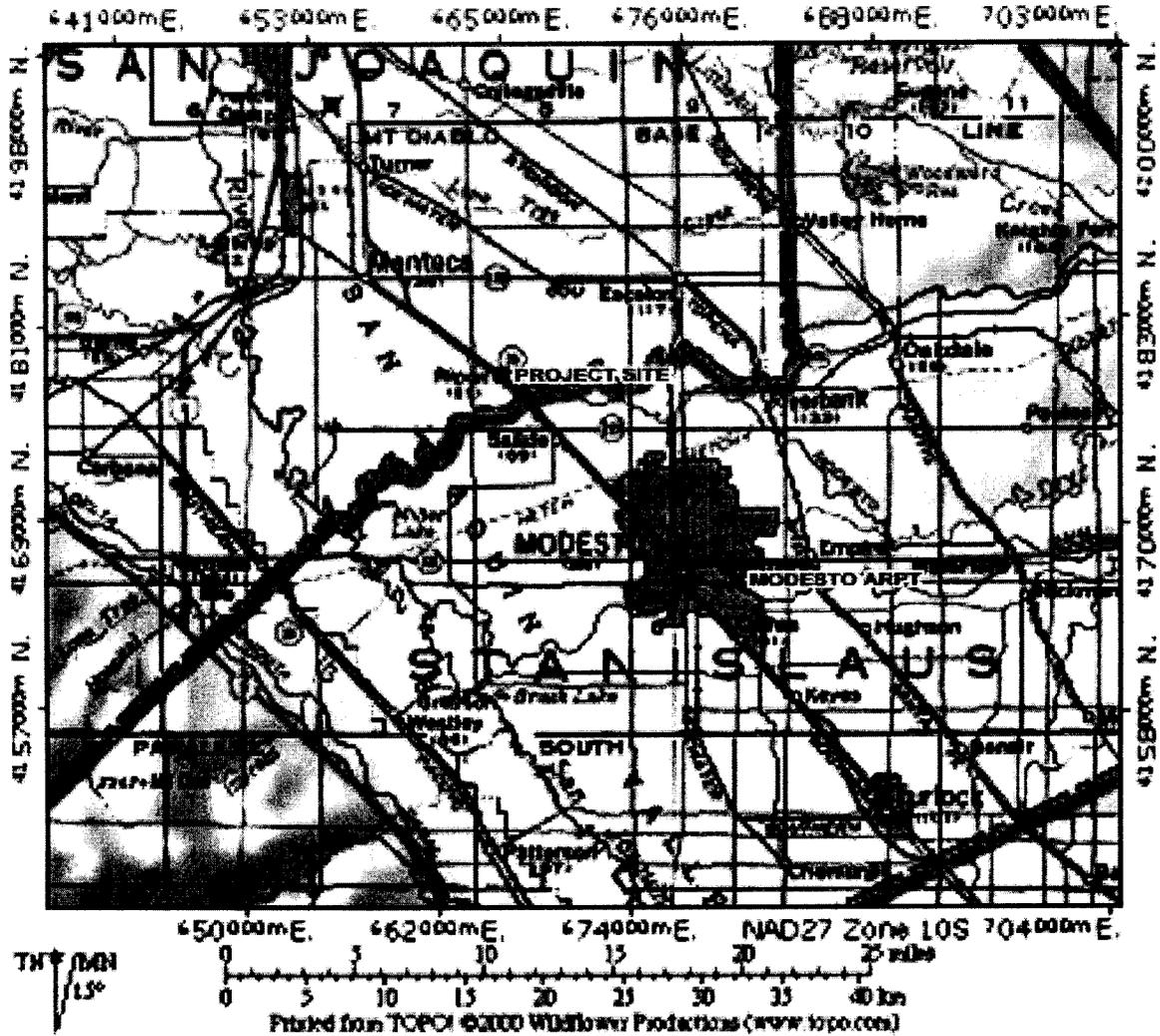
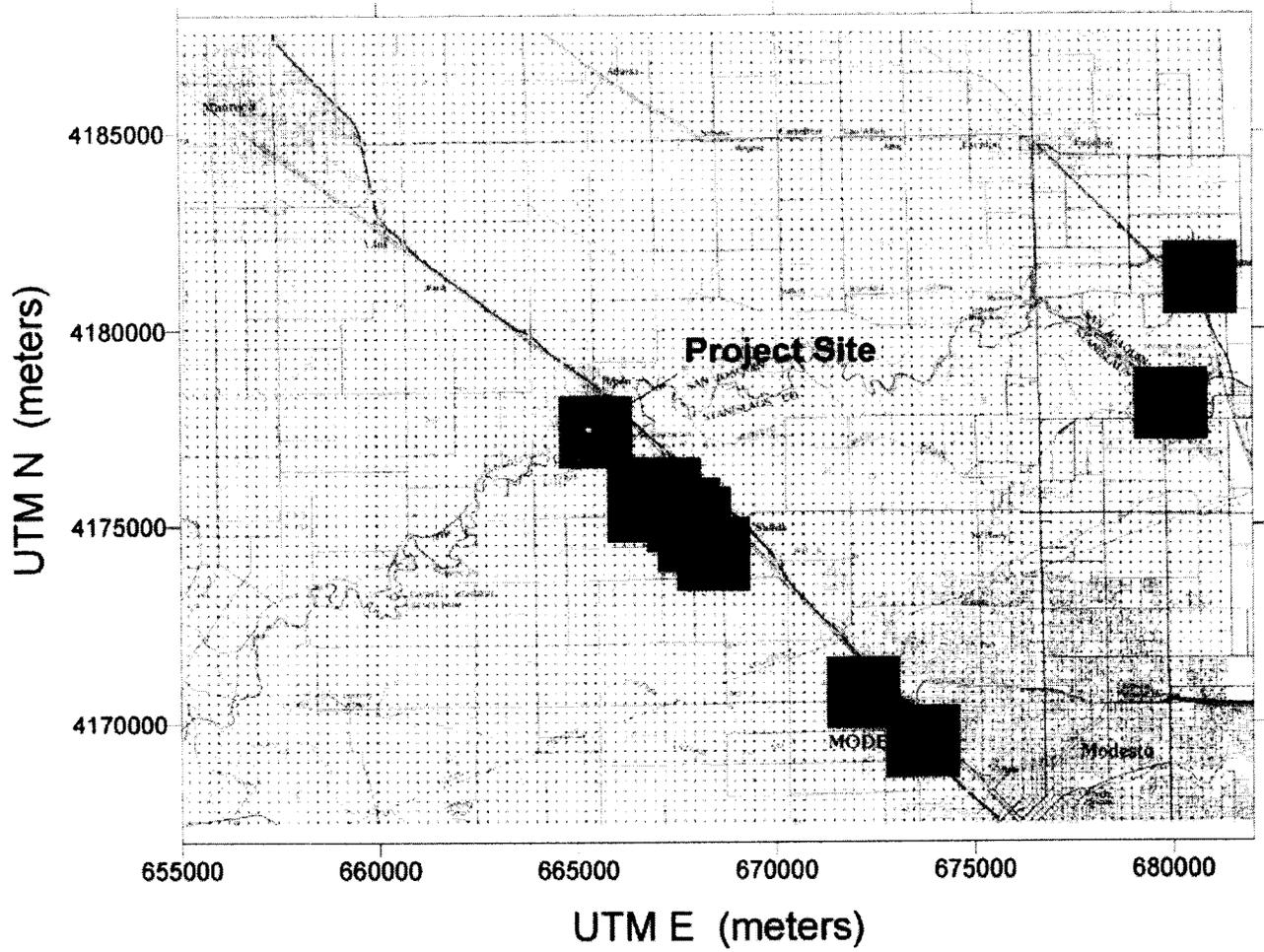


Figure 8.1-17  
Site Map



**Figure 8.1-18  
Receptor Grids**



**Figure 8.1-19  
HAPs Impacts and Sensitive Receptors**

